



◆ Northstar January 2014

- cycle 2 / ddt
- envelope sheets

◆ Background for changes:

- complete summary for technical assessment/feasibility
- take load off from science support

observations prepared directly from the information in Northstar

- bug fixing and user friendliness

Thanks!

Mansura Habiba
& Beta testers!

Northstar update 22-1-2014



Netherlands Institute for Radio Astronomy

◆ lofar.astron.nl/proposal

A screenshot of the LOFAR APP's login page. The page has a background image of a radio telescope array. The text "Welcome at LOFAR APP's" is at the top left, and the ASTRON logo is at the top right. Below the header, there are input fields for "Username: frieswijk" and "Password: *****". A "Log in" button is below the password field. At the bottom, there are four buttons: "Register as new user", "Password forgotten?", "Send Questions/Problems", and "Help".

Show reviewed proposals : ☐ Yes ☒ No

Proj_ID	PI	Title	Community	Category	Status	Options									
LOFAR telescope Proposals															
	Frieswijk	Test Jan 21 2014	LOFAR community	regular	in preparation		Edit		Copy		Delete		Submit		View
	Frieswijk	fcs	LOFAR community	regular	in preparation		Edit		Copy		Delete		Submit		View
	Frieswijk	Test 2014-01-08	LOFAR community	regular	in preparation		Edit		Copy		Delete		Submit		View
	Frieswijk		LOFAR community	regular	in preparation		Edit				Delete		Submit		View
	Oonk	Copy of LOFAR Galactic Radi...	LOFAR community	regular	in preparation		Edit								View
LRA12A001	Frieswijk	Just a test from science su...	LOFAR community	reserved_access	in preparation		Edit				Delete		Submit		View

Create new proposal

Applicants



Netherlands Institute for Radio Astronomy

◆ add applicants from another proposal

Applicants Justification Observing Request target list Additional issues

[? Help](#)

Active Participant	contact author	PI	name	affiliation	country	email	potential observer
yes			Dr Wilfred Frieswijk	Astron	The Netherlands	frieswijk@astron.nl	<input type="checkbox"/>

Select Proposal to import Applicant -- None Specified --

[Add applicant from other proposal](#)

[Add new applicant](#)

[Save and Continue](#) [Save and Preview](#) [Save and Exit](#) [Save and Submit](#) [Quit without saving](#)

Justification file: upload pdf & envelope sheet

Applicants Justification Observing Request target list Additional issues

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Help

Title (Max characters:150) : Test 2014-01-08 (Characters entered: 15)*

Abstract (Max words:180) : Abstract text (Words entered: 2)*

Justification File(s):
Instructions for preparation

Envelope sheet :

First Justification File : Just_6p.pdf (358 KB) * Upload
uploaded 2014/01/08 15:05 UTC

Save and Continue Save and Preview Save and Exit Save and Submit Quit without saving

◆ envelope sheet improved

◆ file upload restrictions

Upload justification file

Instructions for preparation Help

Note: Only pdf files are allowed. Follow the [Instructions for preparation] to prepare the pdf and keep the number of pages within the limits of what is allowed for the specific call. If your proposal does not follow these instructions it may be rejected.

Maximum number of pages in the justification file to depend on the total requested observing time.

- If Total requested observing time <= 250 hours: up to 4 pages
- If Total requested observing time <= 500 hours: up to 5 pages
- If Total requested observing time <= 750 hours: up to 6 pages
- If Total requested observing time <= 1000 hours: up to 7 pages
- If Total requested observing time > 1000 hours: up to 8 pages

Upload Scientific Justification File : Choose File No file chosen

Upload Cancel

Observing requests: telescope/pipeline configurations

step 1



Applicants Justification Observing Request target list Additional issues

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◆ more information

Id	Targets	Runs	Telescope	Mode	Exposure (Hours)	BF Data (TB)	Store Raw Data	UV Data (TB)	Store UV Data	Total LTA Storage (TB)			
A	0 targets	0 runs	LOFAR	Interferometer	0	0.0	NO	0.0	NO	0.0	Edit	Copy	Delete
B	0 targets	0 runs	LOFAR	Interferometer	0	0.0	NO	0.0	NO	0.0	Edit	Copy	Delete
C	0 targets	0 runs	LOFAR	Interferometer	0	0.0	YES	0.0	NO	0.0	Edit	Copy	Delete
D	0 targets	0 runs	LOFAR	Interferometer	0	0.0	NO	0.0	NO	0.0	Edit	Copy	Delete
E	0 targets	0 runs	LOFAR	Beam Observation	0	0.0	YES	0.0	NO	0.0	Edit	Copy	Delete
F	0 targets	0 runs	LOFAR	TBB	0	0.0	NO	0.0	NO	0.0	Edit	Copy	Delete

Specify a new observation

Id	Targets	Telescope	Mode	av time	av freq	demixing	Total LTA Storage (TB)	P/O Ratio	Total Processing Time (Hours)			
A	0 targets	LOFAR	Pre processing only	1.0	1.0	Y(CygA,CasA)	0.0			Edit	Copy	Delete
B	0 targets	LOFAR	Pre processing only	10.0	64.0	N	0.0			Edit	Copy	Delete
C	0 targets	LOFAR	Pre processing only	5.0	16.0	N	0.0			Edit	Copy	Delete
D	0 targets	LOFAR	Calibration	10.0	64.0	N	0.0			Edit	Copy	Delete
E	0 targets	LOFAR	Calibration + imaging	10.0	64.0	N	0.0			Edit	Copy	Delete
F	0 targets	LOFAR	Pre processing only	10.0	64.0	Y(CygA,CasA)	0.0			Edit	Copy	Delete
G	0 targets	LOFAR	Pulsar pipeline			N	0.0			Edit	Copy	Delete
H	0 targets	LOFAR	Pulsar pipeline			N	0.0			Edit	Copy	Delete

Specify a new Pipeline :

Observing requests: telescope/pipeline configurations

step 1



Applicants Justification Observing Request target list Additional issues

Telescope configuration :

Telescope : LOFAR

Choose an observing mode : **Interferometer**

Choose stations : -- None Specified --

Choose clock : 200 MHz

Choose antenna : -- None Specified --

Choose filter : -- None Specified --

Channels per subband : ☐ 1 ☐ 16 ☐ 32 ☒ 64 ☐ 128 ☐ 256 ☐ 512

Required noise level (Jy) :

Integration time: (seconds) :

Keep correlated visibilities data : ☐ Yes ☒ No

Telescope configuration :

Telescope : LOFAR

Choose an observing mode : **Beamformed**

Choose stations : -- None Specified --

Choose clock : 200 MHz

Choose antenna : -- None Specified --

Choose filter : -- None Specified --

Coherent stokes : ☐ Yes ☒ No

Incoherent stokes : ☐ Yes ☒ No

Fly's eye : ☐ Yes ☒ No

Raw voltage : ☐ Yes ☒ No

Tied array rings :

Channels per subband : ☐ 1 ☐ 16 ☐ 32 ☒ 64 ☐ 128 ☐ 256 ☐ 512

Stokes integration steps :

Keep raw observation data : ☐ Yes ☒ No

Correlated visibilities : ☒ Yes ☐ No

Integration time: (seconds) :

Keep correlated visibilities data : ☐ Yes ☒ No

Commit Observation specification

Save and Continue Save and Preview Save and Exit Save and Submit Quit without save

Processing mode: **Pre processing only**

Flagging strategy : **default**

Averaging time steps: [] [steps]

Averaging freq. steps : [] [steps]

Demixing ? ☐ Yes ☒ No

Demixing time steps : [] [steps]

Demixing freq. steps : [] [steps]

Demixing sources :

- ☐ CygA
- ☐ CasA
- ☐ TauA
- ☐ VirA
- ☐ HerA
- ☐ HydA

No imaging selected in processing mode

Subbands per image : [] [int]

Field of view : [] [deg]

Pre processing parameters

Processing mode: **Pulsar pipeline**

Configuration comments :

Commit Pipeline

beamformed + interferometer

Target list: manual or upload



step 2

Applicants Justification Observing Request target list Additional issues

◆ improved
target
view

Run#	Field	RA	Dec	Epoch	Time(Hours)	Subbands	Calibr.	Obs.	Pipe.	Comments	Edit	Copy	Delete
1	3C196	08:13:36.07	+48:13:02.6	J2000	100	12_499		A	A	split in 10-12hr blocks			
2	3C196	14:11:20.60	+52:12:09.0	J2000	0.17	55_420		B	B	flux cal			
3	DF001	17:10:00.00	+60:50:00.0	J2000	6	55_420		B	C	target beam			
	3C343	16:34:33.81	+62:45:36.0	J2000		55_77,401_420		B	B	cal beam			
4	3C48	01:37:41.30	+33:09:35.1	J2000	0.17	55_420		B	B	flux cal			
5	3C147	05:42:36.26	+49:51:07.1	J2000	1	52_467	Y	C	D	Calibrator Run#5-6			
6	DC156	05:32:32.00	+52:50:00.1	J2000	6	52_467		C	E	Target Run#5-6			
7	F1479	06:03:00.00	+52:00:00.0	J2000	14	156_316		D	F	Target beam			
	F1480	07:08:00.00	+44:00:00.0	J2000		156_316		D	F	Target beam			
	3C196	08:13:36.07	+48:13:02.6	J2000		156_316	Y	D	F	Calibrator beam			
8	P0123	01:02:03.00	+82:00:00.0	J2000	1	256_300		E	G	Beamformed			
9	empty	00:00:00.00	+00:00:00.0	J2000	1,500	55		F	H	TBB piggyback			

New Target :

Calibration beam? : ☐ Yes ☒ No

Field name : [Get RA & Dec from Simbad](#) NB: proposers should check coordinates

RightAscension : hh:mm[:ss.ss]

Declination : [+ | -] dd:mm[:ss.ss]

Epoch : J2000

Flux density (Jy) : Reference frequency (MHz) :

Spectral index α ($S(\nu) \propto \nu^{-\alpha}$) :

Subband list :

NB: Put Frequency and Bandwidth and get SubbandList calculated. Otherwise put SubbandList manually. For Example: 2-315,15-115 etc. The maximum number of subbands per run is 488

Central frequency : Bandwidth :

Run# : 1

Exposure time in minutes :

Select observation :

Select processing pipeline :

Comments :

Commit to list of targets

Clear target form

Upload a target list

Delete all targets

◆ frequency/subband helper

◆ target upload (recommended)

Observing requests: targets coupled

step 1



Applicants Justification Observing Request **target list** Additional issues

Applicants Justification Observing Request **target list** Additional issues

? Help

Id	Targets	Runs	Telescope	Mode	Exposure (Hours)	BF Data (TB)	Store Raw Data	UV Data (TB)	Store UV Data	Total LTA Storage (TB)			
A	1 targets	1 runs	LOFAR	Interferometer	100	0.0	NO	299.5	NO	0.0	Edit	Copy	Delete
B	4 targets	3 runs	LOFAR	Interferometer	6.33	0.0	NO	85.13	NO	0.0	Edit	Copy	Delete
C	2 targets	2 runs	LOFAR	Interferometer	7	0.0	YES	68.61	NO	0.0	Edit	Copy	Delete
D	3 targets	1 runs	LOFAR	Interferometer	14	0.0	NO	27.05	NO	0.0	Edit	Copy	Delete
E	1 targets	1 runs	LOFAR	Beam Observation	1	7.19	YES	1.51	NO	7.19	Edit	Copy	Delete
F	1 targets	1 runs	LOFAR	TBB	1,500	0.0	NO	0.0	NO	0.0	Edit	Copy	Delete

Specify a new observation

Id	Targets	Telescope	Mode	av time	av freq	demixing	Total LTA Storage (TB)	P/O Ratio	Total Processing Time (Hours)			
A	1 targets	LOFAR	Pre processing only	1.0	1.0	Y(CygA,CasA)	599.0	10.5(1)	1050.0	Edit	Copy	Delete
B	3 targets	LOFAR	Pre processing only	10.0	64.0	N	0.19	0.5(1) 1.5(2)	3.5	Edit	Copy	Delete
C	1 targets	LOFAR	Pre processing only	5.0	16.0	N	0.69	1.5(1)	9.0	Edit	Copy	Delete
D	1 targets	LOFAR	Calibration	10.0	64.0	N	0.11	1.5(1)	1.5	Edit	Copy	Delete
E	1 targets	LOFAR	Calibration + imaging	10.0	64.0	N	0.11	c:1.5i:0.9(1)	14.4	Edit	Copy	Delete
F	3 targets	LOFAR	Pre processing only	10.0	64.0	Y(CygA,CasA)	0.09	7.0(3)	294.0	Edit	Copy	Delete
G	1 targets	LOFAR	Pulsar pipeline			N	0.0	0.5(1)	0.5	Edit	Copy	Delete
H	1 targets	LOFAR	Pulsar pipeline			N	0.0	0.5(1)	750.0	Edit	Copy	Delete

Specify a new Pipeline :

Observing requests: targets coupled

step 1



Applicants Justification Observing Request target list Additional issues

Applicants Justification Observing Request target list Additional issues

? Help

LOFAR

Time specified for targets (in hours):
Total 1,628.33

Hours requested this period (incl. cal. and o/heads) :
Total **1650**

Minimum useful time (hours):
Total **1000** ← ♦ minimum requested time

Storage specified: 300.09 TB
Long term LTA storage requested in terabytes (10^{12} bytes):
Total **300**

Night time required : ☒

Other scheduling details : Anything

Save and Continue Save and Preview Save and Exit Save and Submit

Specify a new Pipeline :

Id	Targets
A	1 targets
B	4 targets
C	2 targets
D	3 targets
E	1 targets
F	1 targets

Id	Target
A	1 target
B	3 target
C	1 target
D	1 target
E	1 target
F	3 target
G	1 target
H	1 targets

LOFAR Pulsar pipeline N 0.0 0.5(1) 750.0

Copy Delete Copy Delete Copy Delete Copy Delete Copy Delete Copy Delete Copy Delete Copy Delete

Final words



Netherlands Institute for Radio Astronomy

Northstar for Cycle 2 will be available soon

questions:

- mail: sciencesupport@astron.nl